

## Type I and II Ground Disturbing Categorical Exclusion Action Classification Form

Project No.	BR-0125
WBS Element	48834.1.1
Federal Project No.	N/A

### A. Project Description:

The North Carolina Department of Transportation (NCDOT) proposes to replace Bridge No. 960663 on SR 1002 (Traphill Road) over East Prong Roaring River in Wilkes County (Refer to Figure 1).

Bridge No. 960663, built in 1950, is a steel girder bridge with two 11-foot travel lanes and is approximately 151 feet long. Bridge No. 960663 has a posted single vehicle weight limit of 24 tons and a truck tractor semitrailer weight limit of 31 tons. The existing right of way along SR 1002 (Traphill Road) is 36 feet. The project is scheduled for Right of Way (ROW) in September 2019 and Let in June 2020. Minor ROW acquisition is anticipated.

The project proposes to replace the existing structure with an approximately 33-foot wide three-span cored slab bridge with a minimum of two 11-foot travel lanes and four-foot five-inch paved shoulders. The approach roadways will have two 11-foot travel lanes and four foot shoulders (two-feet paved), with guardrail will be installed at the bridge approaches. The proposed bridge would be approximately 163 feet in length and with a proposed right of way ranging from 45-130 feet. New pavement on SR 1002 (Traphill Road) will be required for the new roadway alignment. Improvements to Twin Locust Road include re-alignment to tie into SR 1002 (Traphill Road). The total length of the project is approximately 1,193 feet. The proposed bridge will not be posted with a weight restriction and will be designed to meet the legal load rating. The bridge replacement would be constructed on a new alignment east of the existing bridge. The existing bridge will serve as an onsite detour during construction. The roadway is classified as a Major Collector with a 55-mile per hour design speed and 55-mile per hour posted speed limit.

### B. Description of Need and Purpose:

The replacement of Bridge No. 960663 is part of the *Growing Rural Economy and Agriculture through Transportation and Technology Enhancement or Replacement in North Carolina (GREATTER-NC)* Project under the United States Department of Transportation's 2018 Better Utilizing Investments to Leverage Development (BUILD) Grant program. The purpose of the grant and this bridge replacement project is to provide transportation infrastructure to support economic development and improve physical and digital connectivity in rural communities in North Carolina. The posted weight restriction on Bridge No. 960663 prohibits large or heavy vehicles, typically used in transporting agricultural and manufactured products, from using the bridge. Vehicles above the posted weight must detour 4.4 miles to avoid the bridge. Replacing the existing bridge will eliminate posted weight limits by providing a safe crossing for all legal

loads and will make accommodations for broadband installation in order to support economic competitiveness.

**C. Categorical Exclusion Action Classification:**

TYPE I A

**D. Proposed Improvements:**

- 28. Bridge rehabilitation, reconstruction, or replacement or the construction of grade separation to replace existing at-grade railroad crossings, if the actions meet the constraints in 23 CFR 771.117(e)(1-6).

**E. Special Project Information:**

**Anticipated Permit or Consultation Requirements:** A Nationwide Permit (NWP) No. 3- Maintenance, NWP No.14- Linear Transportation Projects, and/or NWP No. 23- Approved Categorical Exclusion will likely be applicable. The US Army Corps of Engineers (USACE) holds the final discretion as to what permit will be required to authorize project construction. A Section 404 permit is required and a Section 401 Water Quality Certification (WQC) from the North Carolina Division of Water Resources (NCDWR) is needed.

**Floodplain:** East Prong of Roaring River, which crosses under Bridge No. 960663, is in a FEMA Zone AE Floodplain. The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP), to determine status of project regarding applicability of NCDOT'S Memorandum of Agreement, or approval of a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR). See Section I, Project Commitments.

**Historic and Archaeological Resources:** In compliance with NCDOT'S Programmatic Agreement with the State Historic Preservation office, NCDOT Human Environment Section completed a *No Survey Required Form* for Historic Architecture and Landscapes on 10/28/2018, and for Archaeological Resources on 02/26/2019.

**Agricultural Land Use:** Agricultural land use including large commercial poultry farms, cattle, crop including hay, and dairy farms was identified surrounding the project area using aerial imagery and confirmed during the April 2019 site visit. Impacts to farming operations have been minimized by use of an on-site detour; however, minor right of way acquisition will be required for the project. Continued coordination should occur through right of way with the owners of the agricultural lands to ensure that access is maintained for farm equipment and impacts to agricultural operations are minimized during construction. See Section I, Project Commitments.

**Environmental Commitments:** Project commitments are located at the end of the checklist in Section I.

**Estimated Costs (FY 2020):** The estimated costs are as follows:

Utility*	106,400
R/W**	23,213
Const.***	2,550,000
<b>Total</b>	<b>\$2,679,613</b>

Sources: \* Connect GREATTER Rural Bridge Program- Bridges Budget Sources and Uses, Accessed June 11, 2019.

<https://connect.ncdot.gov/resources/GREATTER-Rural-Bridge-Program/Documents/05%20NCDOT%20Bridges%20Budget%20Sources%20and%20Uses.xlsx>

\*\* NCDOT Right of Way Appraisal Unit, July 2019

\*\*\* NCDOT Contracts Standards and Development Unit, August 2019

**Estimated Traffic:**

Average Daily Traffic (ADT) 2016      1,500 vehicles per day (vpd)

Average Daily Traffic (ADT) 2040      2,000 vpd

Source: NCDOT Traffic Review Sheet, 2018

**Crashes:** A NCDOT Traffic Safety Unit crash report indicates six (6) crashes occurred from 05/01/2014 to 04/30/2019 within 800 feet east and west of Bridge No. 960663 on SR 1002 (Traphill Road). Of the six crashes, three (3) were fixed object, and two (2) were collisions with an animal, one (1) of which occurred on Bridge No. 960663. Two (2) crashes had Type-B injuries; there were no Type-A injuries or fatalities. The proposed work will include the installation of guardrail at the bridge approaches and include the addition of two-foot shoulders on the bridge.

**Pedestrian and Bicycle Accommodations:** There are no existing bike or pedestrian facilities on Bridge No. 960166 along SR 1002 (Traphill Road). However, a local citizen identified that the corridor may be used for bicycling events and the local planner noted recreational bicycle use in the project area.

The *2017 Wilkes County Transportation Plan (CTP)* indicates that SR 1002 has been identified as a proposed bicycle route in the *High County Bike Plan (2014)*. Recommendations for roadways identified as proposed bicycle facilities include; 5 foot bike lanes or 14 foot outside lanes, 4 foot paved shoulders, and 54 inch railings on bridges. The project proposes suitable shoulder width on the bridge, however, current roadway design proposes two-foot paved shoulders, which is inconsistent with the recommendations provided in the CTP. A Start of Study letter was sent to NCDOT Bicycle & Pedestrian Division; no comments were received.

**Design Exceptions:** A design exception for the horizontal curve radius is required to minimize Waters of the U.S. impacts, and vertical k-value is needed to avoid a sag curve on the bridge and to limit tie-ins. This will result in a speed limit reduction (40 miles per hour) at the bridge approaches.

**Alternative Analysis:**

**No Build** – The no build alternative would not meet the requirements of the GREATTER-NC Project, and thus is not a viable option.

**Rehabilitation** – Rehabilitation would not meet the requirements of the GREATTER-NC Project, and thus is not a viable option.

**New Alignment (Preferred Alternative)** – The proposed structure will have a new alignment east of the existing bridge, to avoid impacts to the stream north of the existing bridge and to allow for the utilization of existing bridge as an onsite detour.

**Replace Bridge in Place with Offsite Detour** – An offsite detour is not proposed as part of this project, as an onsite detour allows for better flow of traffic than an offsite detour; an offsite detour may be difficult for school buses that utilize the bridge as noted by the Wilkes County Schools Transportation Director, as well as increase emergency services response times as noted by the Wilkes County EMS Director. Additionally, the onsite detour protects minor roads with low traffic that may have been used for an offsite detour from pavement deterioration, and eliminates the need for a longer offsite detour if only major roads are used.

**Agency Comments:** Input forms were sent to the Wilkes County EMS Director, Wilkes County Planning Director, and the Wilkes County Schools Director of Transportation in February and April of 2019.

The Schools Transportation Director indicated that three school busses make a total of nine daily trips across the bridge (approximately 7:00 AM and 3:00 PM) and there would be a high impact to the Wilkes School System if the bridge was closed for up to a year, as the detour route would likely be difficult for the bus to navigate. A low level of impact was noted from the Wilkes County Planning Director if the bridge was closed for up to a year but indicated the presence of the Traphill Elementary School and the Traphill Branch of the Appalachian Regional Library in the project vicinity. Wilkes County EMS noted a yearlong bridge closure would have a moderate impact on emergency services due to the potential for long detour routes.

*Response: The existing bridge will serve as an onsite detour during construction, Traffic will be maintained on the existing bridge during construction and shift to the new alignment upon completion of the new bridge.*

Agency Start of Study notifications were sent to the **USACE, Federal Highway Administration (FHWA), NC Wildlife Resources Commission (NC WRC), U.S. Fish and Wildlife Service (USFWS), NC Department of Environmental Quality – Division of Water Resources (NC DEQ - DWR), and NC Division of Parks and Recreation (NC DPR)** in May 2019, and to the **Eastern Band of Cherokee Indians, Cherokee Nation of Oklahoma, and United Keetoowah Band of Cherokee Indians** in July of 2019. Start of Study notifications were also sent to NCDOT Division 11 and NCDOT Preconstruction contacts in May 2019.

Comments provided by **USFWS** regarding the project include the following: recommendations for erosion and sediment control, Northern long-eared bat (NLEB), migratory birds, and replacing structures that cross rivers and streams. Project-specific comments regarding the potential for the Brook Floater (*Alasmidonta varicosa*) to occur in the study area were provided.

*Response: The NLEB has been assessed by the NCDOT Biological Surveys Group, and the nearest NLEB hibernacula record is 42 miles west of the project and no known NLEB roost trees occur within 150 feet of the project area. The requested preliminary plans were provided to USFWS on 7/24/19. NCDOT Environmental Analysis Unit (NCDOT EAU) confirmed that no action regarding the Brook Floater is required at this time.*

**NC DWR** noted that the East Prong of Roaring River is classified as a Trout waters of the State, and recommended that sediment and erosion control BMPs are implemented to reduce the risk of turbidity violations in trout waters. General project comments regarding 401 Water Quality Certification, erosion and sediment control BMPs, and mitigation for impacts to waters of the U.S. are also included in the response.

*Response: The Natural Resources Technical Report (NRTR) completed in June 2019 for this project identifies the East Prong Roaring River as a Hatchery Supported Trout Water. NC WRC notified NCDOT on 08/14/19 that a construction moratorium is not required for this project, however, the project will adhere to Design standards for sensitive watersheds (DSSW). See Section I, Project Commitments.*

**NC WRC** provided comments regarding trout moratorium; a trout moratorium is not required for this project.

*Response: Comment noted.*

**USACE** and **NC DPR** had no specific comments regarding the proposed actions. No response was received by **FHWA, Eastern Band of Cherokee Indians, Cherokee Nation of Oklahoma, and United Keetoowah Band of Cherokee Indians.**

**Public Involvement:** A landowner notification letter was sent on 2/7/2019 to property owners adjacent to the bridge to inform them of representatives being present on their property for surveys. No comments have been received to date.

**F. Project Impact Criteria Checklists:**

<u>Type I &amp; II - Ground Disturbing Actions</u>			
<u>FHWA APPROVAL ACTIVITIES THRESHOLD CRITERIA</u>			
If any of questions 1-7 are marked "yes" then the CE will require FHWA approval.		Yes	No
1	Does the project require formal consultation with U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	Does the project result in impacts subject to the conditions of the Bald and Golden Eagle Protection Act (BGPA)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	Does the project generate substantial controversy or public opposition, for any reason, following appropriate public involvement?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	Does the project cause disproportionately high and adverse impacts relative to low-income and/or minority populations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5	Does the project involve a residential or commercial displacement, or a substantial amount of right of way acquisition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6	Does the project require an Individual Section 4(f) approval?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7	Does the project include adverse effects that cannot be resolved with a Memorandum of Agreement (MOA) under Section 106 of the National Historic Preservation Act (NHPA) or have an adverse effect on a National Historic Landmark (NHL)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If any of questions 8 through 31 are marked "yes" then additional information will be required for those questions in Section G.			
<u>Other Considerations</u>		Yes	No
8	Does the project result in a finding of "may affect not likely to adversely affect" for listed species, or designated critical habitat under Section 7 of the Endangered Species Act (ESA)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9	Is the project located in anadromous fish spawning waters?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10	Does the project impact waters classified as Outstanding Resource Water (ORW), High Quality Water (HQW), Water Supply Watershed Critical Areas, 303(d) listed impaired water bodies, buffer rules, or Submerged Aquatic Vegetation (SAV)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11	Does the project impact waters of the United States in any of the designated mountain trout streams?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12	Does the project require a U.S. Army Corps of Engineers (USACE) Individual Section 404 Permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13	Will the project require an easement from a Federal Energy Regulatory Commission (FERC) licensed facility?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
14	Does the project include a Section 106 of the NHPA effects determination other than a no effect, including archaeological remains?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<u>Other Considerations (continued)</u>		Yes	No
15	Does the project involve hazardous materials and/or landfills?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
16	Does the project require work encroaching and adversely affecting a regulatory floodway or work affecting the base floodplain (100-year flood) elevations of a water course or lake, pursuant to Executive Order 11988 and 23 CFR 650 subpart A?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17	Is the project in a Coastal Area Management Act (CAMA) county and substantially affects the coastal zone and/or any Area of Environmental Concern (AEC)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18	Does the project require a U.S. Coast Guard (USCG) permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
19	Does the project involve construction activities in, across, or adjacent to a designated Wild and Scenic River present within the project area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
20	Does the project involve Coastal Barrier Resources Act (CBRA) resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
21	Does the project impact federal lands (e.g. U.S. Forest Service (USFS), USFWS, etc.) or Tribal Lands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
22	Does the project involve any changes in access control?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
23	Does the project have a permanent adverse effect on local traffic patterns or community cohesiveness?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
24	Will maintenance of traffic cause substantial disruption?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
25	Is the project inconsistent with the STIP or the Metropolitan Planning Organization's (MPO's) Transportation Improvement Program (TIP) (where applicable)? <b>Not Applicable</b>	<input type="checkbox"/>	<input type="checkbox"/>
26	Does the project require the acquisition of lands under the protection of Section 6(f) of the Land and Water Conservation Act, the Federal Aid in Fish Restoration Act, the Federal Aid in Wildlife Restoration Act, Tennessee Valley Authority (TVA), or other unique areas or special lands that were acquired in fee or easement with public-use money and have deed restrictions or covenants on the property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
27	Does the project involve Federal Emergency Management Agency (FEMA) buyout properties under the Hazard Mitigation Grant Program (HMGP)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
28	Does the project include a <i>de minimis</i> or programmatic Section 4(f)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
29	Is the project considered a Type I under the NCDOT's Noise Policy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
30	Is there prime or important farmland soil impacted by this project as defined by the Farmland Protection Policy Act (FPPA)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
31	Are there other issues that arose during the project development process that affected the project decision?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**G. Additional Documentation as Required from Section F**

**Response to Question 1 – Formal Consultation with USFWS or NMFS**

Northern long-eared bat (NLEB) - NCDOT has determined that the proposed action will not require separate consultation on the grounds that the proposed action is consistent with the final Section 4(d) rule, codified at 50 C.F.R. § 17.40(o) and effective February 16, 2016. NCDOT may presume its determination is informed by best available information and consider Section 7 responsibilities fulfilled for NLEB.

**Response to Question 11 – Trout Waters**

The NRTR indicates that the NC WRC identifies the East Prong Roaring River within the study area as a Hatchery Supported Trout Water, beginning at the SR 1002 (Traphill Road) crossing and continuing upstream. NC WRC notified NCDOT on 08/14/19 that a construction moratorium is not required for this project, however, since the Best Usage Classification for this portion of East Prong Roaring River is C;Tr, the project will adhere to Design standards for sensitive watersheds (DSSW). See Section I, Project Commitments.

**Response to Question 16 – Floodplain Impacts**

This project involves construction activities on or adjacent to FEMA-regulated stream(s). Therefore, the Division shall submit sealed as-built construction plans to the Hydraulics Unit upon completion of project construction, certifying that the drainage structure(s) and roadway embankment that are located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically.

The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP), to determine status of project with regard to applicability of NCDOT'S Memorandum of Agreement, or approval of a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR).

**Response to Question 30 - Prime and Important Farmland Soils:**

Prime and Important Farmland Soils as defined by the Farmland Protection Policy Act (FPPA) are located within the project study area. A project footprint for the Prime and Important Farmland Soils assessment was created to include a 25-foot buffer from the slope stakes. The Prime and Important Farmland Soil found within the footprint are designated as all areas are Farmland of Statewide Importance and Prime Farmland if drained and either protected from flooding or not frequently flooded during the growing season.

A Natural Resource Conservation Service (NRCS) Farmland Conversion Impact Rating has been completed for this project and a total score of 29 out of 160 points was calculated for the BR-0125 project site. Since the total of the points assigned in part VI of the NRCS Farmlands Conversion Form AD-1006 for BR-0125 is less than 60 and therefore the total points of the NRCS Farmlands Conversion Form AD-1006 is less than 160, no mitigation for farmland loss is required for the project in accordance with FPPA.



**I. Project Commitments**

**Wilkes County**

**Replace Bridge No. 960663 on SR 1002 (Traphill Road) over East Prong Roaring River**

**WBS No. 48834.1.1**

**Project No. BR-0125**

**NCDOT Hydraulics Unit**

**Floodplain Mapping Coordination**

The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP), to determine status of project with regard to applicability of NCDOT'S Memorandum of Agreement, or approval of a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR).

**NCDOT Hydraulics Unit**

**FEMA Coordination**

This project involves construction activities on or adjacent to FEMA-regulated stream(s). Therefore, the Division shall submit sealed as-built construction plans to the Hydraulics Unit upon completion of project construction, certifying that the drainage structure(s) and roadway embankment that are located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically.

**NCDOT Roadside Environmental Unit**

**Trout Water**

Design standards for sensitive watersheds (DSSW) will be adhered to for the project due to the Best Usage Classification of C;Tr for this portion of the East Prong Roaring River.

**NCDOT – Division 11**

**Agricultural Land Use**

Continued coordination should occur through right of way with the owners of the agricultural lands that are impacted by the right of way needs for the project.

**NCDOT Division 11**

**Continued Coordination for Schools and Emergency Services**

NCDOT should coordinate with Wilkes County Schools (Eric Barker, 336-667-1126) and Wilkes County Emergency Services (Timothy Pennington, 336-651-7363) at least one month prior to construction.

09/08/19

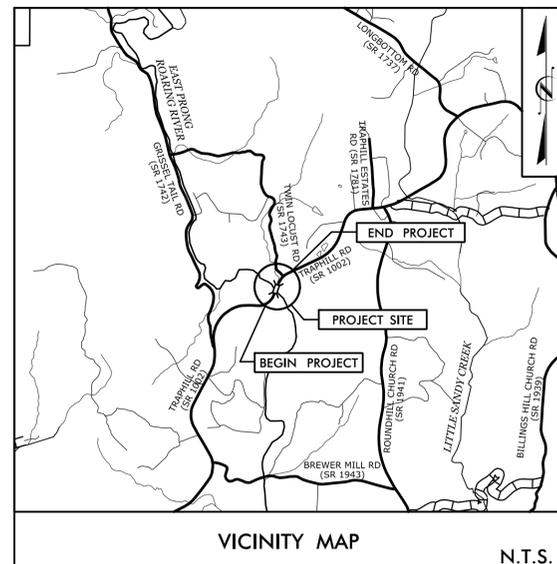
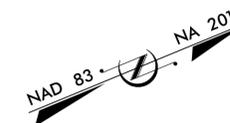
See Sheet 1A For Index of Sheets  
See Sheet 1B For Standard Symbol Sheet

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**WILKES COUNTY**

**LOCATION: BRIDGE #663 OVER EAST PRONG ROARING RIVER ON SR 1002 (TRAPHILL RD)**  
**TYPE OF WORK: GRADING, DRAINAGE, PAVING, & STRUCTURE**

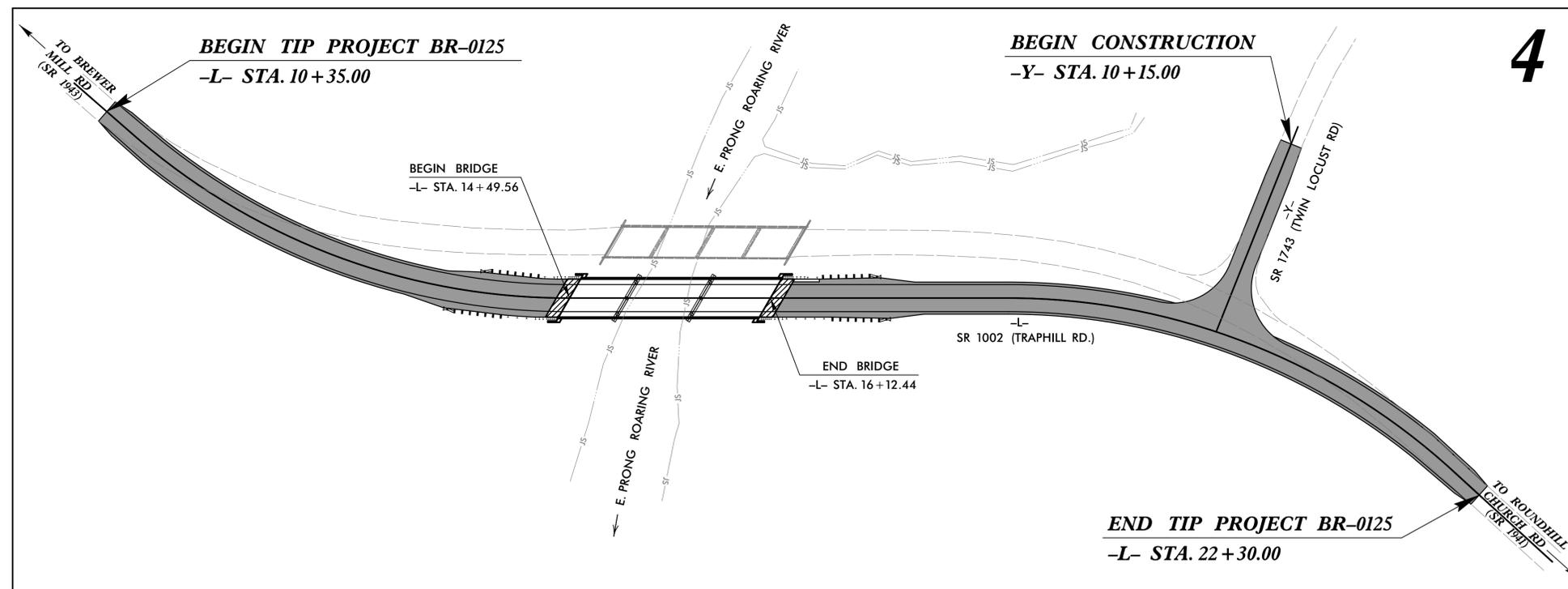
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	<b>BR-0125</b>	<b>1</b>	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
67125.1.1		P.E.	



VICINITY MAP

N.T.S.

PRELIMINARY PLANS



**4**

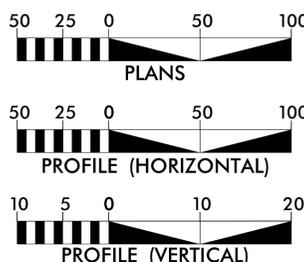
DESIGN EXCEPTION REQUIRED FOR HORIZONTAL CURVE RADIUS AND VERTICAL CURVE K-VALUE & NIGHTTIME SSD.  
THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.  
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD   

INCOMPLETE PLANS  
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

**CONTRACT:**

GRAPHIC SCALES



DESIGN DATA

ADT 2016 = 1500  
ADT 2040 = 2000  
DHV = N/A  
D = N/A  
T = N/A  
V = 55 MPH

FUNC. CLASSIFICATION:  
MAJOR COLLECTOR  
SUB-REGIONAL TIER

PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT BR-0125 = 0.195 MILES  
LENGTH OF STRUCTURE TIP PROJECT BR-0125 = 0.031 MILES  
TOTAL LENGTH OF TIP PROJECT BR-0125 = 0.226 MILES

NCDOT CONTACT: TIERRE PETERSON, PE  
Structures Management Unit

PLANS PREPARED FOR THE NCDOT BY:



2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:  
SEPTEMBER 12, 2019

LETTING DATE:  
JUNE 5, 2020

NIKKI T. HONEYCUTT, PE  
PROJECT ENGINEER

BHUPESH R. JOSHI, EIT  
PROJECT DESIGNER

HYDRAULICS ENGINEER

SIGNATURE:  
ROADWAY DESIGN ENGINEER

SIGNATURE:

P.E.

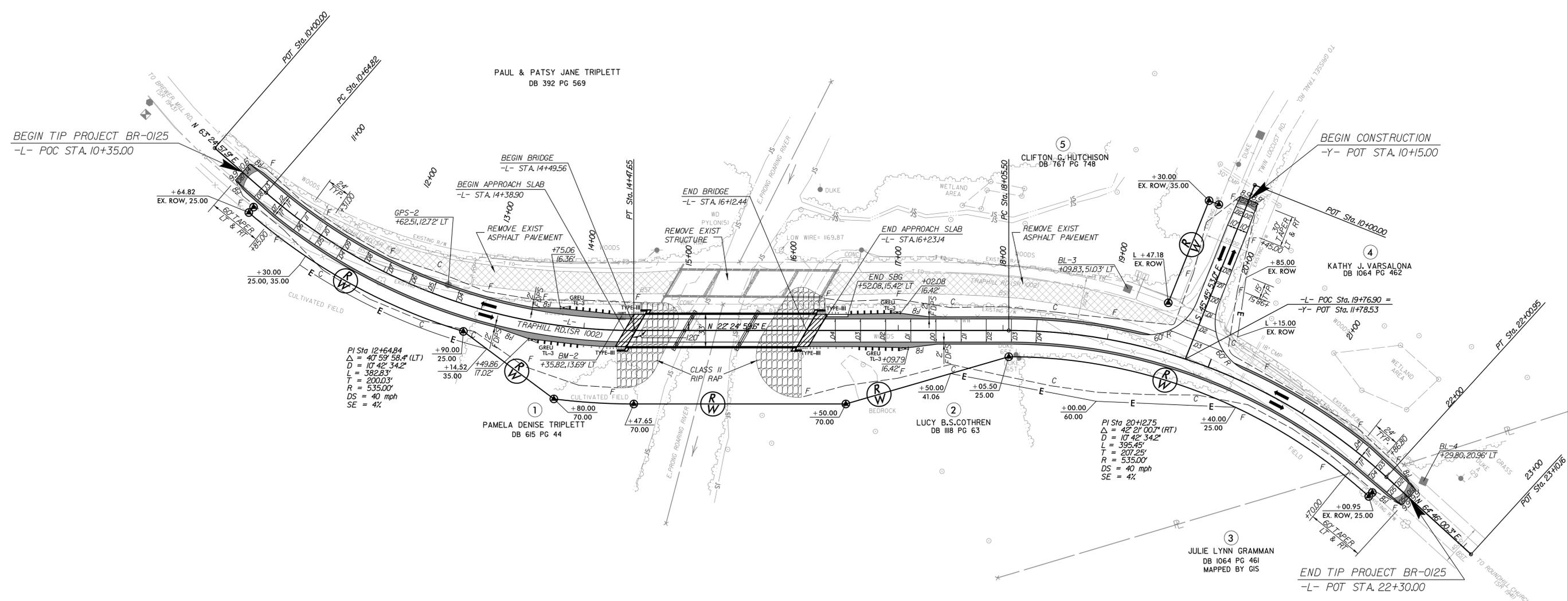
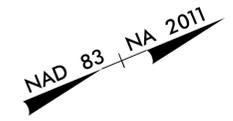
P.E.



8/17/19

**STV** 100 Years  
 STV Engineers, Inc.  
 800 West Trade St., Suite 715  
 Charlotte, NC 28202  
 NC License Number F-0991

PROJECT REFERENCE NO. BR-0125		SHEET NO. 4	
RW SHEET NO.		HYDRAULICS ENGINEER	
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
<b>INCOMPLETE PLANS</b> DO NOT USE FOR R/W ACQUISITION			
<b>DOCUMENT NOT CONSIDERED FINAL</b> UNLESS ALL SIGNATURES COMPLETED			

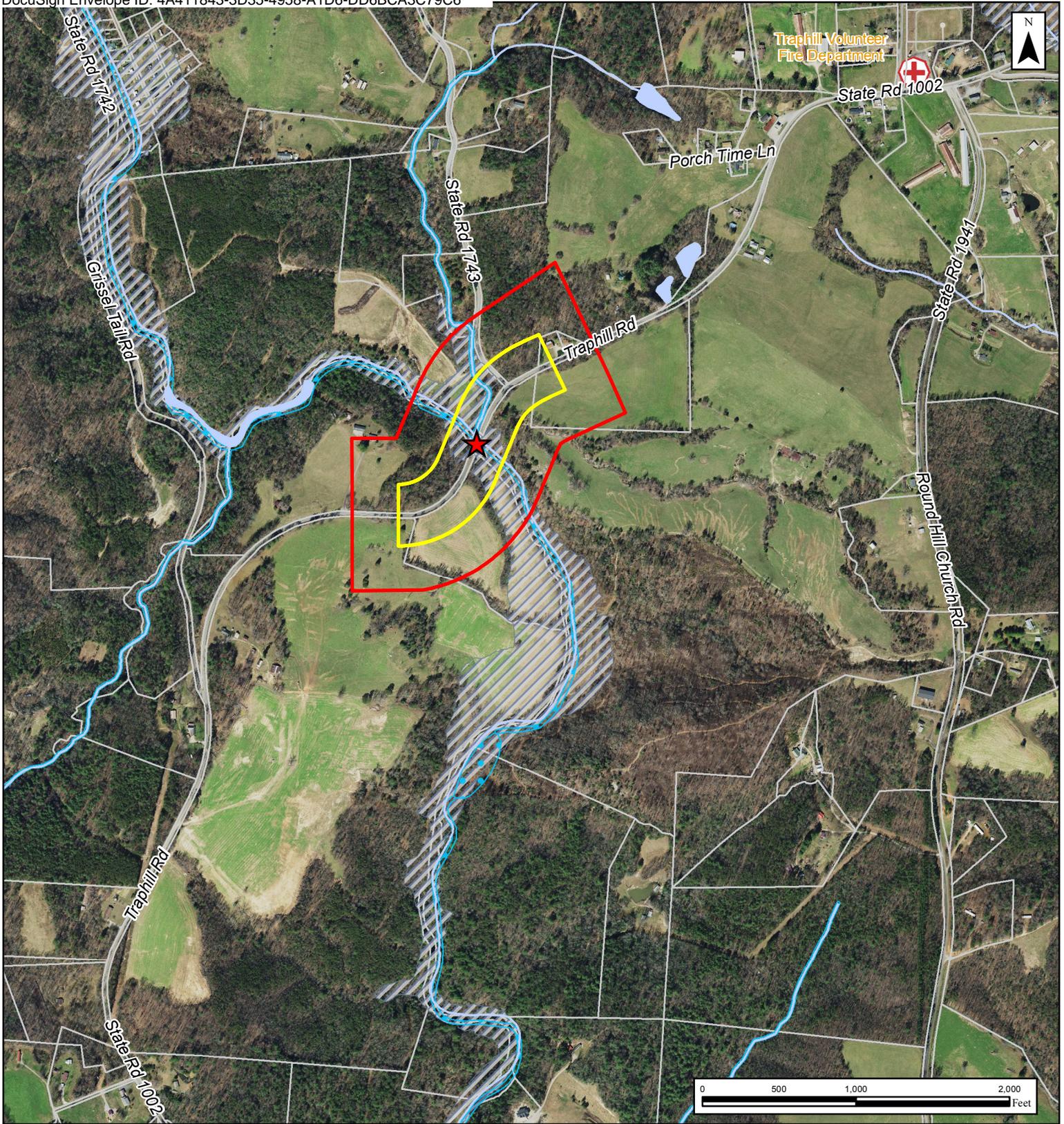


NOTE: INCIDENTAL MILL APPROXIMATELY 25' AT EACH TIE IN TO PROVIDE A SMOOTH TRANSITION TO THE EXISTING PAVEMENT

\* DESIGN EXCEPTION REQUIRED FOR HORIZONTAL CURVE DESIGN SPEED.

SEE SHEET 5 FOR -L- & -Y- PROFILE

F:\V\2019\Projects\Projects\SH\BR-0125\_rdy\_psh04.dgn  
 10/10/2019 10:44:10 AM



**Legend**

- ★ Br. 960663 over E. Prong of Roaring River
- Project Study
- ▭ Impact Area (DCIA)
- Stream
- ▨ Floodplain
- ▭ NWI Wetland
- ▭ Parcel

**Wilkes County, NC**



Sources: Wilkes County GIS Department, NC One Map, NC HPO GIS Portal, & Google Earth

**Bridge No. 960663  
Replacement over  
East Prong of Roaring River  
Wilkes County  
NCDOT Division 11**

July 2019

**Figure 1**



## NO ARCHAEOLOGICAL SURVEY REQUIRED FORM

This form only pertains to ARCHAEOLOGICAL RESOURCES for this project. It is not valid for Historic Architecture and Landscapes. You must consult separately with the Historic Architecture and Landscapes Group.



### PROJECT INFORMATION

*Project No:* BR-0125      *County:* Wilkes  
*WBS No:* 67125      *Document:* Federal Categorical Exclusion  
*Federal Aid No:*      *Funding:*  State       Federal  
*Federal Permit Required?*  Yes       No      *Permit Type:* USACE

#### ***Project Description:***

Replace Bridge 663 on SR 1002 (Traphill Rd.) over the East Prong Roaring River in Wilkes County. The Area of Potential Effects (A.P.E.) is approximately 459 meters (1,506ft.) long and 122 meters (400 ft.) wide. The project is State-funded and will require Federal permits. Easements will be required.

### SUMMARY OF CULTURAL RESOURCES REVIEW

#### ***Brief description of review activities, results of review, and conclusions:***

The review included an examination of a topographic map, an aerial photograph, and records about previously recorded sites, previous archaeological surveys, and previous environmental reviews at the North Carolina Office of State Archaeology (OSA) in Raleigh. Also, a reconnaissance of the project was conducted on 1/8/2019. Bridge 663 is oriented northeast-southwest but is considered north-south for this review.

The topographic map (Traphill) shows the A.P.E. is located in a narrow stream valley. An unnamed tributary joins the East Prong Roaring River in the northwest quadrant. SR 1743 intersects with SR 1002 at the north end of the northwest quadrant. The landforms in the A.P.E. appear to be narrow floodplain on each side of the river, and gently to moderately-sloped ridges. There are no structures in the A.P.E.

The Wilkes County soil survey shows several soil types in the A.P.E. These include Dan River and Comus soils (0-4% slopes), occasionally flooded, Danripple sandy clay loam (2-8% and 8-15% slopes), moderately-eroded, Rhodhiss-Bannertown complex (15-35% slopes) and Rhodhiss-Toast complex (5-15% slopes), and Tate-Cullowee frequently-flooded complex (0-25% slopes). Dan River/Comus soils are well-drained soils found on floodplains,. Danripple sandy clay loam is a well-drained soil found on slopes on stream terraces. Rhodhiss-Bannertown and Rhodhiss-Toast complex soils are well-drained soils found on ridge side-slopes. Tate-Cullowee complex soils are well-drained soils found on stream terraces. Level landforms with well-drained soils near streams have a moderate to high potential for archaeological sites.

The aerial photograph shows the land use in the A.P.E. is a mix of wooded and cleared. The

northwest quadrant is mostly wooded. The unnamed stream that joins the East Prong is visible along the west side of SR 1002. There is a cleared pasture located along the west side of the stream. SR 1743 joins SR 1002 near the north end. A house and yard are located at the north edge of the A.P.E. The northeast quadrant is wooded in the south half and cleared (pasture?) in the north half. A stream (not shown on the topographic map) runs through the south half of the A.P.E. The southeast quadrant is mostly cleared (pasture?). The southwest quadrant is wooded.

A reconnaissance of the A.P.E. was conducted by NCDOT archaeologist Caleb Smith on 1/8/2019. The reconnaissance found that the landforms in the A.P.E. have a low to moderate potential for archaeological sites. The northwest quadrant is a narrow strip of sloped land between the road and the unnamed stream from the bridge north for approximately 120 meters (394 ft.), then the intersection with SR 1743. The northeast quadrant is a steeply-sloped ridge from the bridge north for approximately 100 meters (328 ft.). The ridge slope is wooded and covered with large boulders. A stream runs along the east side of SR 1002. The northern half of the quadrant is an undulating ridge top currently used as a hay field. The southeast quadrant is a narrow strip of floodplain from the bridge south for approximately 40 meters (131 ft.), then a slope up to a gently-sloped ridge top. The ridge top is currently an agricultural field. The southwest quadrant is a poorly-drained floodplain from the bridge south for 60 meters (197 ft.), then a sloped ridge. An old road runs along the base of the slope. The abutments from a previous bridge are located on both banks of the river approximately 90 meters (295 ft.) upstream (northwest) from the bridge.

***Brief Explanation of why the available information provides a reliable basis for reasonably predicting that there are no unidentified historic properties in the APE:***

The landforms in the A.P.E. have a low to moderate potential for archaeological sites. The soils on the landforms are mostly sloping and/or eroded.

**SUPPORT DOCUMENTATION**

See attached:  Map(s)     Previous Survey Info     Photos     Correspondence  
 Photocopy of County Survey Notes    Other:

**FINDING BY NCDOT ARCHAEOLOGIST**

**NO ARCHAEOLOGY SURVEY REQUIRED**

Caleb Smith

2/26/2019

NCDOT ARCHAEOLOGIST II

Date

18-09-0087



## HISTORIC ARCHITECTURE AND LANDSCAPES NO SURVEY REQUIRED FORM

This form only pertains to Historic Architecture and Landscapes for this project. It is not valid for Archaeological Resources. You must consult separately with the Archaeology Group.

### PROJECT INFORMATION

<b>Project No:</b>	BR-0125	<b>County:</b>	Wilkes
<b>WBS No.:</b>	67125.1.1	<b>Document Type:</b>	MCC
<b>Fed. Aid No:</b>		<b>Funding:</b>	<input checked="" type="checkbox"/> State <input type="checkbox"/> Federal
<b>Federal Permit(s):</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>Permit Type(s):</b>	USACE
<b>Project Description:</b> Replace Bridge No. 663 on SR 1002 (Traphill Rd) over East Prong Roaring River			

### SUMMARY OF HISTORIC ARCHITECTURE AND LANDSCAPES REVIEW

<p><b><u>Description of review activities, results, and conclusions:</u></b> Review of HPO quad maps, relevant background reports, historic designations roster, and indexes was undertaken on October 23, 2018. Based on this review there are no NR, DE, LL, SL or SS in the Area of Potential Effects (APE). There is one structure over 50 years of age. This 1960 brick veneer ranch house does not rise to the level of significance or architectural integrity to warrant further evaluation. No Survey is required at this time.</p> <p><b><u>Why the available information provides a reliable basis for reasonably predicting that there are no unidentified significant historic architectural or landscape resources in the project area:</u></b> Using HPO GIS website and county tax data provides reliable information regarding the structures in the APE. These combined utilities are considered valid for the purposes of determining the likelihood of historic resources being present.</p>
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### SUPPORT DOCUMENTATION

Map(s)    Previous Survey Info.    Photos    Correspondence    Design Plans

### FINDING BY NCDOT ARCHITECTURAL HISTORIAN

Historic Architecture and Landscapes -- NO SURVEY REQUIRED

*Shelby Reap*  
\_\_\_\_\_  
NCDOT Architectural Historian

*10/23/2018*  
\_\_\_\_\_  
Date

## NCRS Farmland Conversion Impact Rating: Bridge No. 960663 on SR 1002 (Traphill Road) over East Prong of Roaring River in Wilkes County, NC

### PRELIMINARY SCREENING OF FARMLAND CONVERSION IMPACTS – POINT PROJECT

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1. **Area in non-urban use. Points awarded = 11 out of 15**  
Estimated using aerial photography; approximately 70% of the land within the 1-mile buffer is non-urban.
2. **Perimeter in non-urban use. Points awarded = 5 out of 10**  
Estimated using aerial photography; approximately 50% borders on land in non-urban use.
3. **Percent of site being farmed. Points awarded = 3 out of 20**  
Estimated using aerial photography; approximately 30% of the site is being farmed.
4. **Protection provided by state and local government. Points awarded = 0 out of 20**  
The site is not designated as a Voluntary Agriculture District (VAD) or Enhanced Voluntary Agriculture District (EVAD).
5. **Distance from urban built-up area. Points awarded = 0 out of 15**  
Determined using aerial photography; site is adjacent to the Traphill community.
6. **Distance to urban support services. Points awarded = 0 out of 15**  
Services exist within ½ mile of the project site.
7. **Size of present farm unit compared to average. Points awarded = 0 out of 10**  
The farm units are more than 50% below the average size farm unit in Wilkes County (114 acres)
8. **Creation of non-farmable farmland. Points awarded = 0 out of 10**  
This project will have no implications on remaining farmable land.
9. **Availability of farm support services. Points awarded = 0 out of 5**  
No farm support services were identified within the site.
10. **On-farm investments. Points awarded = 10 out of 20**  
Some on-farm investments including barns and storage buildings were identified using aerial imagery.
11. **Effects of conversion on farm support services. Points awarded = 0 out of 10**  
No significant reduction in demand for farm support services would occur as a result from the project.
12. **Compatibility with existing agricultural use. Points awarded = 0 out of 10**  
The project is compatible with existing agricultural use.

### **Conclusion: Total Points = 29 out of 160**

NCDOT has completed a screening of farmland in the project area and calculated the total number of points for the site per Part VI of the NRCS AD-1006 Farmland Conversion Impact Rating Form.



## Sources

US Census. Census of Agriculture. 2012. County Data. North Carolina. Wilkes County. Accessed 6/14/2019.

[https://www.nass.usda.gov/Publications/AgCensus/2012/Full\\_Report/Volume\\_1,\\_Chapter\\_2\\_County\\_Level/North\\_Carolina/st37\\_2\\_001\\_001.pdf](https://www.nass.usda.gov/Publications/AgCensus/2012/Full_Report/Volume_1,_Chapter_2_County_Level/North_Carolina/st37_2_001_001.pdf)[https://www.nass.usda.gov/Publications/AgCensus/2012/Online\\_Resources/County\\_Profiles/North\\_Carolina/cp37097.pdf](https://www.nass.usda.gov/Publications/AgCensus/2012/Online_Resources/County_Profiles/North_Carolina/cp37097.pdf)

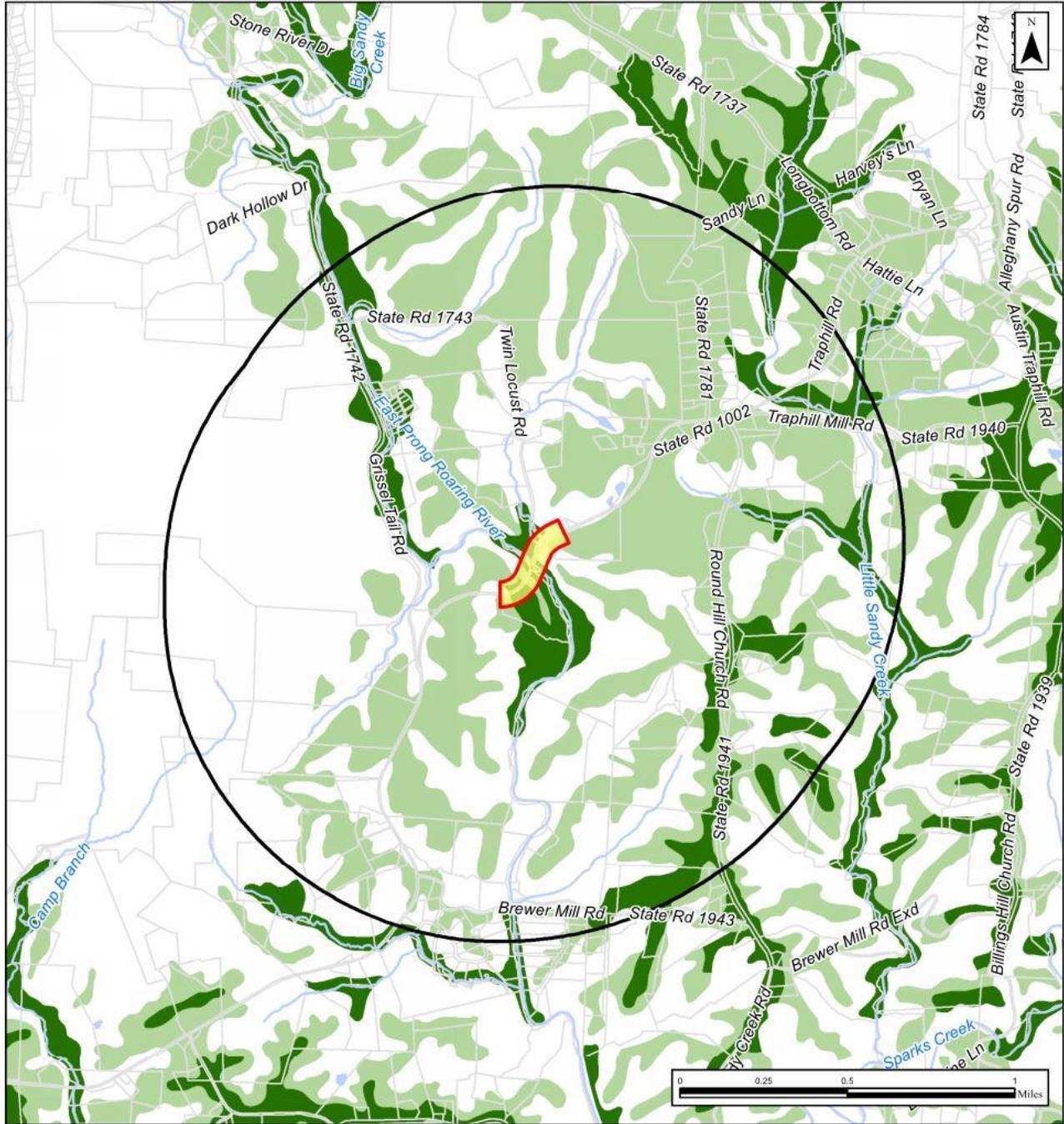
Wilkes County. GIS Application. Wilkes County, NC. Accessed 6/14/2019.

<https://gis.wilkescounty.net/main/#>

Legal Information Institute. Section 658.5- Criteria. Accessed 6/14/2019.

<https://www.law.cornell.edu/cfr/text/7/658.5>





 	<p><b>Legend</b></p> <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; border: 1px solid red; margin-right: 5px;"></span> Project Study Area</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: yellow; border: 1px solid red; margin-right: 5px;"></span> Project Footprint</li> <li><span style="display: inline-block; width: 15px; height: 10px; border: 1px solid black; margin-right: 5px;"></span> 1-mile Buffer</li> <li><span style="display: inline-block; width: 15px; height: 10px; border-bottom: 1px solid blue; margin-right: 5px;"></span> Stream</li> <li><span style="display: inline-block; width: 15px; height: 10px; border: 1px solid gray; margin-right: 5px;"></span> Parcel</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #006400; margin-right: 5px;"></span> Prime Farmland</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #90EE90; margin-right: 5px;"></span> Farmland of Statewide Importance</li> </ul>	<p>Wilkes County, NC</p>  <p>Sources: Wilkes County GIS Department, NC One Map &amp; Google Earth</p>	<p>Bridge No. 960663                  Replacement over                  East Prong of Roaring River                  Wilkes County                  NCDOT Division 11</p> <p>July 2019</p> <p>NCRS Farmland Figure</p>
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